

**Table 313: Muons in Meitnerium**

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	a	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
109 (Mt)	[268.1387]	??	1115.0	0.27580	3.0000	0.6426	3.0000	6.5724	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
10.0 MeV	$4.704 \times 10^1$	3.624				3.624	$1.643 \times 10^0$		
14.0 MeV	$5.616 \times 10^1$	2.925				2.925	$2.882 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	2.352				2.352	$5.191 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	1.875				1.875	$1.001 \times 10^1$		
40.0 MeV	$1.003 \times 10^2$	1.628				1.628	$1.577 \times 10^1$		
80.0 MeV	$1.527 \times 10^2$	1.264				1.264	$4.445 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.201				1.201	$6.072 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.144				1.144	$9.498 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.123	0.000			1.123	$1.481 \times 10^2$		
207. MeV	$2.943 \times 10^2$	1.123	0.000			1.123	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.137	0.000		0.000	1.138	$2.367 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.166	0.000		0.000	1.167	$3.236 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.268	0.001		0.000	1.270	$6.512 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.305	0.002		0.000	1.308	$8.064 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.363	0.003		0.000	1.367	$1.105 \times 10^3$		
2.00 GeV	$2.103 \times 10^3$	1.424	0.005	0.000	0.001	1.430	$1.534 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.490	0.009	0.003	0.001	1.504	$2.214 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.536	0.014	0.007	0.001	1.558	$2.867 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	1.635	0.033	0.025	0.003	1.698	$5.317 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	1.665	0.044	0.037	0.004	1.750	$6.477 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	1.706	0.068	0.061	0.005	1.841	$8.703 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	1.747	0.106	0.102	0.007	1.962	$1.186 \times 10^4$		
30.0 GeV	$3.011 \times 10^4$	1.789	0.173	0.182	0.010	2.156	$1.672 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	1.817	0.245	0.270	0.014	2.347	$2.116 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	1.880	0.553	0.662	0.027	3.124	$3.589 \times 10^4$		
100. GeV	$1.001 \times 10^5$	1.899	0.717	0.874	0.034	3.525	$4.192 \times 10^4$		
115. GeV	$1.150 \times 10^5$	1.911	0.840	1.033	0.039	3.824	<i>Muon critical energy</i>		
140. GeV	$1.401 \times 10^5$	1.928	1.052	1.310	0.047	4.338	$5.213 \times 10^4$		
200. GeV	$2.001 \times 10^5$	1.957	1.576	2.002	0.067	5.604	$6.428 \times 10^4$		
300. GeV	$3.001 \times 10^5$	1.991	2.469	3.157	0.100	7.719	$7.943 \times 10^4$		
400. GeV	$4.001 \times 10^5$	2.015	3.392	4.355	0.133	9.897	$9.085 \times 10^4$		
800. GeV	$8.001 \times 10^5$	2.073	7.195	9.266	0.269	18.807	$1.197 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.092	9.147	11.779	0.338	23.359	$1.292 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.121	13.054	16.788	0.479	32.445	$1.437 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.152	19.025	24.433	0.693	46.305	$1.591 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.188	28.984	37.133	1.058	69.365	$1.766 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.213	39.068	49.968	1.430	92.681	$1.891 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.276	79.685	101.552	2.967	186.483	$2.189 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.297	100.137	127.478	3.756	233.671	$2.284 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.329	140.929	179.211	5.374	327.845	$2.428 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.363	202.444	257.138	7.852	469.799	$2.580 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.402	304.951	386.772	12.130	706.257	$2.753 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	2.431	407.817	516.703	16.506	943.459	$2.875 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	2.501	819.240	1036.796	34.759	1893.298	$3.168 \times 10^5$		
100. TeV	$1.000 \times 10^8$	2.524	1025.070	1297.080	44.180	2368.856	$3.262 \times 10^5$		